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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/524,076	03/13/2000	Peter Chalkowsky	TN-1698	6474
7590	05/14/2004		EXAMINER	
Adan Ayala TW199 Black & Decker Corporation 701 East Joppa Road Towson, MD 21286			ASHLEY, BOYER DOLINGER	
			ART UNIT	PAPER NUMBER
			3724	15

DATE MAILED: 05/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/524,076	CHALKOWSKY, PETER
Examiner	Art Unit	
Boyer D. Ashley	3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
 THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 03 March 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-11 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

1. This office action is in response to applicant's response filed 3/3/04. No claims were amended. Claims 1-11 remain pending in the instant application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2 and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiotani et al., U.S. Patent 5,063,802, in view of DE 197 06 408, hereinafter DE '408.

Shiotani et al. discloses the invention substantially as claimed, including, e.g., a base assembly (1); a fence (10) attached to the base assembly (see Figure 1) for supporting a workpiece, the fence has a fence plane (the vertical abutting surface of the fence as shown in Figure 1); a rotatable table (2) rotatably connected to the base assembly, the table having a table plane (the horizontal surface of the table as shown in Figure 1) for supporting a workpiece; a saw assembly (7,8,9 as shown in Figure 1) including a motor (5) and a blade (7) driven by the motor, the blade having a radius (see Figure 1, wherein a circular blade is clearly shown) and a blade center (although not given a specific reference numeral the center is clearly shown in Figure 1); and a pivot arm (4) pivotally attached to the table through support arm 3 and pivotally supporting the saw assembly about a first axis (see the axis shown in Figure 1 between arms 3 and

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4) substantially parallel to the table plane (see Figure 1), thereby allowing the user to plunge the blade below the table plane (see Figure 1).

Shiotani et al. appears from the drawings to have the following limitations but is silent to the specifics dimension of the distance between the first axis and the table plane being about 0.472 time the radius; the distance between the first axis and the fence plane being about 1.45 times the radius; and the distance of the between the first axis and the blade center being about 1.882 times the radius.

DE '408 discloses that it is old and well known in the art that there is a need to cut various sized workpieces with a single miter saw as well as to modified existing miter saws in order to cut various sized workpieces.

In light of DE '408 and because it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art and further because such a modification would have involved a mere change in the size of a component and changes in size are generally recognized as being within the level of ordinary skill in the art, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the miter saw of Shiotani et al. with the specific dimensions stated above in order to allow for larger boards to be placed on and cut by the miter saw.

As to claim 1, the modified device of Shiotani et al. appears to disclose an area of the blade plunge below the table plane as being capable of being between about

14.4% and about 17.5 % of the total blade area and more specifically 15.75% based upon the blade size as well as how much is it is plunged. In the alternative, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the blade of the modified device of Shiotani et al. be capable of plunging between 14.4% and 17.5% of the total blade area below the table plane and more specifically about 15.75% in order to facilitate cutting larger sized boards, as also taught by DE '408 and because it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges or values involves only routine skill in the art.

As to claim 5, the modified device of Shiotani et al. discloses a miter saw that is capable of having the distance between the blade center and the table plane being about 0.57 times the radius of the when the blade is plunged depending upon how much the blade is plunged.

As to claim 6, the modified device of Shiotani et al. discloses a miter saw that is capable of having the a chord length of the blade periphery plunged below the table plane being at least 1.6 times the radius of the blade depending upon how much the blade is plunged.

4. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 197 06 408, hereinafter DE '408.

DE '408 discloses the invention substantially as claimed, including, e.g., a base assembly (2); a fence (6,6',7,7') attached to the base assembly (see Figure 1) for supporting a workpiece, the fence has a fence plane (the vertical abutting surface of the

fence as shown in Figure 1); a rotatable table (4/18) rotatably connected to the base assembly, the table having a table plane (the horizontal surface of the table as shown in Figure 1) for supporting a workpiece; a saw assembly (10,15 as shown in Figure 1) including a motor (14) and a blade (12) driven by the motor, the blade having a radius (see Figure 1, wherein a circular blade is clearly shown) and a blade center (13); and a pivot arm (generally indicated as 11 in Figure 1) pivotally attached to the table through support arm (not labeled) and pivotally supporting the saw assembly about a first axis (see the axis shown in Figure 1) substantially parallel to the table plane (see Figure 1), thereby allowing the user to plunge the blade below the table plane (see Figure 1).

DE '408 appears from the drawings to have the following limitations but is silent to the specifics dimension of the distance between the first axis and the table plane is about 0.472 time the radius; the distance between the first axis and the fence plane is about 1.45 times the radius; and the distance of the between the first axis and the blade center is about 1.882 times the radius.

DE '408 discloses that it is old and well known in the art that there is a need to cut various sized workpieces with a single miter saw as well as to modified existing miter saws in order to cut various sized workpieces.

In light of DE '408 and because it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art and further because such a modification would have involved a mere change in

the size of a component and changes in size are generally recognized as being within the level of ordinary skill in the art, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the miter saw of DE '408 with the specific dimensions stated above in order to allow for larger boards to be placed on and cut by the miter saw.

As to claim 1, the modified device of DE '408 appears to disclose an area of the blade plunge below the table plane as being capable of being between about 14.4% and about 17.5 % of the total blade area and more specifically 15.75% based upon the blade size as well as how much it is plunged. In the alternative, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the blade of the modified device of DE '408 be capable of plunging between 14.4% and 17.5% of the total blade area below the table plane and more specifically about 15.75% in order to facilitate cutting larger sized boards, as also taught by DE '408 and because it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges or values involves only routine skill in the art.

As to claim 3, the modified device of DE '408 discloses a miter saw with a slidable fence (6 or 6').

As to claim 5, the modified device of DE '408 discloses a miter saw that is capable of having the distance between the blade center and the table plane being about 0.57 times the radius of the when the blade is plunged depending upon how much the blade is plunged.

As to claim 6, the modified device of DE '408 discloses a miter saw that is capable of having the a chord length of the blade periphery plunged below the table plane being at least 1.6 times the radius of the blade depending upon how much the blade is plunged.

As to claims 7-11, the modified device of DE '408 appears from the drawings to have the following limitations in at least one embodiment, see Figure 4, including a chord of the blade periphery plunged below the table plane with endpoints behind and in front of the fence and as to the specific distance it should be noted that the modified device of DE '408 is clearly capable of the distance merely by selecting the appropriate sized blade as well as the amount of the blade that it is plunged.

In the alternative, even if it is argued that the modified device of DE '408 lacks the specific distance of a) at least 1.1 times the radius of the blade; b) at least between about 1.236 to about 1.252 times the radius; c) at least 1.244 times the radius; d) between about 0.60 to 0.775 times the chord length of the blade; and/or about 0.757 times the chord length, it should be noted that the modified device of DE '408 discloses that it is old and well known in the art that there is a need to cut various sized workpieces with a single miter saw as well as to modified existing miter saws in order to cut various sized workpieces and in light of the embodiment shown in Figure 4 of DE '408 and because it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art and further because

such a modification would have involved a mere change in the size of a component and changes in size are generally recognized as being within the level of ordinary skill in the art, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the miter saw of the modified device of DE '408 with the specific distance between the fence and the endpoint in front of the fence as one of the specific distances mentioned above in order to support a workpiece relative to the blade such that larger boards can be cut by smaller blades.

Response to Arguments

5. Applicant's arguments filed 3/3/04 have been fully considered but they are not persuasive.

Applicant's arguments regarding the rejections under 35 USC 112 are persuasive and the rejections have been withdrawn.

Applicant contends that the claimed dimensions are critical because such miter saws with said dimensions can cut certain desired/sized workpieces with a smaller blade. Applicant further contends that the previously submitted declaration, by the instant inventor suggests that the instant application can cut various sized workpieces without changing the position of the fence plane. Therefore, applicant contends that the instant applicant is patentably distinct from the prior art because the prior art fence of DE '408 is adjustably attached to the miter saw.

The examiner respectfully disagrees for the following reasons. Without rehashing the points of the previous declaration by the instant inventor, it should be noted that examiner has never questioned the intent of the instant invention that is, a

miter saw with a fixed fence that can cut both 4 by 4 and 6.5 by $\frac{3}{4}$ inch sized boards. However, the limitation of a fixed fence and specific sized boards are not recited in the claims. Moreover, DE '408 discloses two embodiments, one with a fixed fence, as shown in Figures 3 and 4, and the other embodiment is depicted in Figure 5 with a fence moved or rather placed on the cutting table in the shown position. The first embodiment is capable of cutting two different sized boards, one 4x4 and the other 6x2.5, with the fence in the same position.

As to applicant's comments regarding unexpected results it should be noted that an applicant has to do more than just allege unexpected results. It has been repeatedly held that a patent should not be granted for an applicant's discovery of a result, which would flow naturally from the teachings of the prior art where the general conditions are known. In this case, the examiner believes that this is a clear case of an applicant picking optimum dimensions to achieve a desired result where the result sought and the general dimensions to achieve the results are known. DE '408 discloses the desire for using a 10-inch blade to cut multiple sized boards with or without moving a fence. Therefore, it is within the expected skills of one having ordinary skill in this art to arrive at the optimum dimensions.

As to applicant's comments regarding the rejection under Shiotani in view of DE '408, it should be noted that the above comments apply equally well as and will not be repeated (no new significant argument being added).

As to applicant's comments that the examiner ignored the declaration, it should be noted that the examiner respectfully disagrees; the examiner never ignored nor

accepted the statements therein. The examiner commented on the declaration in the last advisory. The declaration is from the current inventor, which implies that he has never seen instant claims in any product. Moreover, the declaration attempts to attach criticality to the claimed invention. However, it should be noted that the declaration is that of the instant inventor not a third party, that is, a disinterested person. To what extent should an applicant's own opinion be used in determining criticality? Just because Mr. Chaikowsky in all of his experience has never seen a miter capable of cutting multiple saws like the one in DE '408 does not mean they don't exist nor does it prove criticality. Moreover, the declaration of Chaikowsky is moot because there are no unexpected results, as explained above. DE '408 suggests to one of ordinary skill that there are expected beneficial results, namely cutting difference sized boards with the same type of miter saw or blade diameter with or without repositioning the fence. Such suggestions or results are evidence of obviousness just as unexpected results are evidence of unobviousness.

6. For the reasons above, the grounds of rejection are deemed proper.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Boyer D. Ashley whose telephone number is 703-308-1845. The examiner can normally be reached on Monday-Thursday 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N. Shoap can be reached on 703-308-1082. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Boyer D. Ashley
Primary Examiner
Art Unit 3724

BDA
May 11, 2004